

Atty Dkt. No.: SKEL-012
USSN: 10/661,356

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A method of introducing a flowable orthopedic calcium phosphate cement composition to a cancellous bone target bone site, said method comprising:

delivering said flowable orthopedic cement composition to said target bone site in conjunction with vibration in a manner such that said vibration provides for controlled penetration of said flowable cement composition into said cancellous bone without use of substantial pressure and penetration of said cement into said cancellous bone stops substantially simultaneously with cessation of said vibration.

2. (Original) The method according to Claim 1, wherein said target bone site is part of a reduced fracture.

3.-5. (Cancelled)

6. (Previously Presented) The method according to Claim 1, wherein said method further comprises aspirating marrow from said cancellous bone.

7. (Previously Presented) The method according to Claim 1, wherein said target bone site comprises cancellous bone of a vertebral body.

8. (Original) The method according to Claim 1, wherein said vibration is provided by applying vibratory force to a flowable composition introduction element of a delivery device for said cement.

9. (Original) The method according to Claim 8, wherein said flowable composition introduction element is a needle.

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10. (Original) The method according to Claim 9, wherein said delivery device comprises a vibratory element for vibrating said needle.

11. (Previously Presented) A method of introducing a flowable orthopedic cement composition into a vertebral body, said method comprising:

delivering said flowable calcium phosphate cement composition to said target bone site in conjunction with vibration in a manner such that said vibration provides for controlled penetration of said flowable cement composition into cancellous bone of said vertebral body without use of substantial pressure and penetration of said cement into said cancellous bone stops substantially simultaneously with cessation of said vibration.

12.-17. (Cancelled)

18. (Previously Presented) A system for delivering an orthopedic cement to a target bone site, said system comprising:

- (a) a delivery device for said cement comprising a flowable composition introduction element; and
- (b) a pneumatic vibratory element for vibrating said flowable composition introduction element.

19. (Original) The system according to Claim 18, wherein said flowable composition introduction element is a needle

20. (Original) The system according to Claim 18, wherein said vibratory element is separate from said delivery device.

21. (Original) The system according to Claim 18, wherein said vibratory element is a component of said delivery device.

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22. (Original) The system according to Claim 18, wherein said system further comprises a calcium phosphate cement composition.

23. (Previously Presented) A device for delivering an orthopedic cement to a target bone site, said device comprising:

- (a) a flowable composition introduction element; and
- (b) a pneumatic vibratory element for vibrating said flowable composition introduction element.

24.-25. (Cancelled)

26. (Previously Presented) A kit for delivering an orthopedic cement to a target bone site, said kit comprising:

- (a) a delivery device for said cement comprising a flowable composition introduction element; and
- (b) a pneumatic vibratory element for vibrating said flowable composition introduction element.

27.-30. (Cancelled)

31. (Previously Presented) The method according to Claim 11, wherein said method further comprises removing marrow from said vertebral body.

32. (Previously Presented) The method according to Claim 11, wherein said vibration is provided by applying vibratory force to a flowable composition introduction element of a delivery device for said cement.

33. (Previously Presented) The method according to Claim 32, wherein said flowable composition introduction element is a needle.

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34. (Previously Presented) The method according to Claim 32, wherein said delivery device comprises a vibratory element for vibrating said needle.

35. (Previously Presented) The method according to Claim 34, wherein said vibratory element is a pneumatic vibratory element.

36. (Currently Amended) A method of introducing a flowable orthopedic calcium phosphate cement composition to a cancellous bone target bone site, said method comprising:

delivering said flowable orthopedic cement composition to said target bone site in conjunction with vibration in a manner such that said vibration provides for controlled penetration of said flowable cement composition into said cancellous bone without use of substantial pressure to produce a cancellous bone/cement composite structure, **wherein penetration of said cement into said cancellous bone stops substantially simultaneously with cessation of said vibration and.**

37. (Previously Presented) The method according to Claim 36, wherein said target bone site is part of a reduced fracture.

38. (Previously Presented) The method according to Claim 36, wherein said target bone site comprises cancellous bone of a vertebral body.

39. (Previously Presented) The method according to Claim 38, wherein said method results in about 4 to 10 cubic centimeters of said cement being injected into each side of said vertebral body.

40. (Previously Presented) The method according to Claim 36, wherein said vibration is provided by applying vibratory force to a flowable composition introduction element of a delivery device for said cement.

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41. (Previously Presented) The method according to Claim 40, wherein said flowable composition introduction element is a needle.

42. (Previously Presented) The method according to Claim 41, wherein said delivery device comprises a vibratory element for vibrating said needle.

43. (Previously Presented) The method according to Claim 36, wherein said method provides for greater amounts of cement to be delivered to said target site with less pressure as compared to a control method in which vibration is not employed.